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10/036,486

01/07/2002

Sally Pucilowski

SGT-44

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10/24/2003

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EXAMINER

BOLDEN, ELIZABETH A

ART UNIT

PAPER NUMBER

1755

DATE MAILED: 10/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/036,486

Applicant(s)

PUCILOWSKI ET AL.

Examiner

Elizabeth A. Bolden

Art Unit

1755

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 19-22 and 26-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 and 23-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Any rejections and or objections, made in the previous Office Action, and not repeated below, are hereby withdrawn.

Election/Restrictions

Applicant's election with traverse of Group I in Paper No. 8 is acknowledged.

The examiner has withdrawn the restriction of Group III. The claims of Group III are now grouped with the product claims in Group I.

The traversal is on the ground(s) that the restriction of Group IV was based on an improper combination/subcombination. This is not found persuasive because Group IV is a method of using a product. Should the allowable product claims be allowable the withdrawn process claims will be rejoined.

The restriction of Groups II and IV are maintained. Should the allowable product claims be allowable the withdrawn process claims will be rejoined.

The requirement is still deemed proper and is therefore made FINAL.

Priority

Applicant's claim for domestic priority under 35 U.S.C. 119(e) is acknowledged. However, the provisional applications upon which priority is claimed fail to provide adequate support under 35 U.S.C. 112 for all the claims. The table below shows which claims receive what priority date over the two provisional applications.

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| Instant Claims | Provisional Application No. | Priority Date |
|-------------------------------|-----------------------------|---------------|
| 1-4, 13, 16, 19-20, and 23-26 | 60/259,706 | 01/05/2001 |
| 5-8, 14, 17, 21, and 24-27 | 60/317,493 | 09/07/2001 |
| 9-12, 15, 18, 22, and 25-28 | None | 01/07/2002 |

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mennemann et al., U.S. Patent 4,562,161.

Mennemann et al. teach an optical silicate glass. See abstract of Mennemann et al.

Mennemann et al. differ from the instant claims by not teaching the glass compositional ranges in terms of mol percent.

It appears that the compositional ranges of Mennemann et al. if converted from wt % to mol % would overlap the compositional ranges of instant claims 1-12. Overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected from the overlapping portion of the ranges taught by the

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reference because overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

Mennemann et al. fail to disclose the properties of instant claims 2, 4, 6, 8, 10, and 12. The composition of Mennemann et al. has overlapping ranges of components with the claimed glass; therefore, one of ordinary skill in the art would expect that the glass of Mennemann et al. would have the claimed properties.

Claims 5-12, 14, 15, 17, 18, 24, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin, U.S. Patent Application Publication US2003/0050173 A1.

Lin teaches a glass substrate for an optical interference filter having overlapping ranges of components with instant claims 5-12, 14, 15, 17, 18, 24, and 25. See abstract, page 3, paragraphs [0025]-[0030], and page 5, paragraph [0057]. Lin teaches that the glass has overlapping ranges of thermal expansion coefficient, optical transmittance at 1550 nm, and Young's Modulus with claims 6, 8, 10, and 12. See abstract and page 2, paragraphs [0022]-[0023]. Lin teaches that the glass is used for optical interference filters in fiber optic systems as described in claims 14, 15, 17, and 18. See page 1, paragraphs [0006]-[0009]. Lin also teaches that the interference filters are used to divide or "de-multiplex" optical signals, which meets the limitations of claims 24 and 25. See page 1, paragraph [0008].

Lin fails to teach any anticipatory examples or compositional ranges and property ranges sufficiently specific to anticipate the instant invention. However, Lin teaches ranges of components and properties, which overlap the instant claims 5-12, 14, 15, 17, 18, 24, 25. Overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

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Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected from the overlapping portion of the ranges disclosed by the reference because overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

The reference fails to teach the refractive index and T_g of instant claims 6, 8, 10, and 12, however, one of ordinary skill in the art would expect that a glass with overlapping compositional ranges would have the same refractive index and T_g as recited in claims 6, 8, 10, and 12.

Claims 1-18 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goto, U.S. Patent 6,461,733.

Goto teaches a glass substrate for an optical interference filter. See abstract, and column 2 lines 21-47. Goto teaches that the glass has overlapping ranges of thermal expansion coefficient, optical transmittance at 1550 nm, and Young's Modulus with claims 2, 4, 6, 8, 10, and 12. See abstract and column 2, lines 10-20. Goto teaches that the glass is used for optical interference filters as described in claims 13-15. See column 1, lines 15-30. Goto teaches that the filters are useful in WDM and DWDM optical communication systems. See column 1, lines 24-45 and column 6, line 60 to column 7, line 8.

Goto differs from the instant claims by not teaching the glass compositional ranges in terms of mol percent.

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It appears that the compositional ranges of Goto if converted from wt % to mol % would overlap the compositional ranges of instant claims 1-12. Overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected from the overlapping portion of the ranges taught by the reference because overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

Goto fails to disclose the refractive index and T_g properties of instant claims 2, 4, 6, 8, 10, and 12. The composition of Goto has overlapping ranges of components with the claimed glass; therefore, one of ordinary skill in the art would expect that the glass of Goto would have the claimed properties.

Response to Arguments

Applicant's arguments, see page 13, lines 12-21, filed 6 August 2003, with respect to the 35 USC 102 rejections over Yoshii, Nakashima, Maeda and Yoshii have been fully considered and are persuasive. The rejections of claims 1-12 over Yoshii, Nakashima, Maeda and Yoshii have been withdrawn.

Applicant's arguments in view of Mennemann filed 6 August 2003 have been fully considered but they are not persuasive.

Applicants argue that the examples of Mennemann et al. do not disclose the same range of MgO as defined by the instant claims. This is not deemed persuasive since the reference is not limited to the examples alone for disclosure. See MPEP 2123. Mennemann et al.

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discloses range of MgO from 0-15. See abstract of Mennemann et al. This range of MgO includes no MgO and therefore the ranges overlap the MgO range as recited in claims 1, 3, 5, 7, 9, and 11. See MPEP 2144.05 and the above rejection.

Conclusion

The additional references cited on the 892 have been cited as art of interest since they are considered to be cumulative to or less than the art relied upon in the rejections above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth A. Bolden whose telephone number is 703-305-0124. The examiner can normally be reached on 9:30 am-7:00 pm with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark L. Bell can be reached on 703-308-3823. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

EAB
14 October 2003


DAVID SAMPLE
PRIMARY EXAMINER